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(74) Agent: **HARDING, Tanya, M.**; Klarquist Sparkman,
LLP, One World Trade Center, Suite 1600, 121 SW Salmon
Street, Portland, OR 97204 (US).

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(71) Applicant (*for all designated States except US*): **THE
GOVERNMENT OF THE UNITED STATES OF
AMERICA AS REPRESENTED BY THE SEC-
RETARY, DEPARTMENT OF HEALTH [US/US];**
National Institutes Of Health, Office Of Technology
Transfer, 6011 Executive Boulevard, Suite 325, Rockville,
MD 20852-3804 (US).

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(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **GLADWIN, Mark,**
T. [US/US]; 4927 Nebraska, Avenue, NW, Washington,
DC 20008 (US). **CANNON, Richard III [US/US];**
9413 Kentsdale Drive, Potomac, MD 20854 (US).
SCHECHTER, Alan, N. [US/US]; 5405 Beech Avenue,
Bethesda, MD 20817 (US).

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(54) Title: **USE OF NITRITE SALTS FOR THE TREATMENT OF CARDIOVASCULAR CONDITIONS**

(57) Abstract: It has been surprisingly discovered that administration of pharmaceutically-acceptable salts of nitrite is useful in the regulation of the cardiovascular system. It has also been surprisingly discovered that nitrite is reduced to nitric oxide *in vivo*, and that the nitric oxide produced thereby is an effective vasodilator. These effects surprisingly occur at nitrite doses that do not produce clinically significant methemoglobinemia. These discoveries now enable methods to prevent and treat conditions associated with the cardiovascular system, for example, high blood pressure, pulmonary hypertension, cerebral vasospasm and tissue ischemia-reperfusion injury. These discoveries also provide methods to increase blood flow to tissues, for example, to tissues in regions of low oxygen tension.



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